

Applicant : Ying Wen Hsu
Appl. No. : 10/676,628
Examiner : Lepisto, Ryan
Docket No. : 703427.4002

REMARKS

Objection to Application As Being a Continuation-in-Part Application

The Examiner stated that the application appears to be a continuation-in-part because it adds allegedly new matter of "oblique angle" in claims 1 and 11 that the Examiner believed may not be disclosed in the original application.

Applicants respectfully disagrees that "oblique angle" is new matter. Given the large number of reference numerals and figures, applicants will point out support for "oblique angle" in Figures 11 and 13. At the left center of Figure 11, there is a notch 538 in the movable microstructure 511. The notch 538 has a bottom side 540 in the amended Figure 11 and a top side (unnumbered). See e.g., specification at page 23, paragraph 84. There is a gap 520 between the bottom side 540 of the notch 538 and the corresponding protrusion of a platform 516. Similarly, there is a gap 521 between the top side of the notch 538 and the corresponding protrusion of the platform 516. A light signal traveling along waveguide 513 must jump across the gap 520 in order to get into waveguide 536 or 537 in amended Figure 11. In particular, if one were to look closely at the gap 520 shown in Figure 11, one can see that the light signal jumps across the gap 520 at an oblique angle to the bottom side 540 of the notch 538. Likewise, Figure 11 shows that a light signal 518 jumps across the gap 521 in an oblique angle into the top side of the notch 538. Because of the curvature in the waveguides at the gaps 520, 521 shown in Figure 11, there is an oblique angle between the gaps and the waveguides on movable platform 511. Therefore, when applicants draft claims 1 and 11 to require an oblique angle, no new matter was added.

If the Examiner disagrees, applicant requests that the Examiner call the undersigned attorney to discuss this in greater detail.

Amendments to the Drawings

The Examiner objected to Figure 9 because it refers to the bend as "504," when paragraph 0014 of the specification refers to it as "503." There appears to be a typographical error in the Office Action because Figure 9 refers to the bend as "503", while paragraph 0014 on page 5 of the specification calls it 504. Upon review,

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applicants realize that reference numeral 503 in Figure 9 was a typographical error and submits amended Figure 9 in which the reference numeral 503 pointing to the bend is changed to "504," which is now consistent with the specification. Thus, this objection has been overcome.

The Examiner requested that Figure 10 be designated "Prior Art." Applicants submit amended Figure 10 making this designation. Figure 9 is not prior art and its prior art label should have been for Figure 10. Thus, Figures 9 and 10 were corrected. Thus, this objection has been overcome.

The Examiner objected to the Figures as failing to include reference signs 120, 122, 202, 210, 508, 523, 533, 534, 535, 536, 537, 539, 540 and 650, which are mentioned in the specification. Applicants have added the missing reference numerals in accordance with the specification or point out below where in the Figures that the reference numerals are already shown. Reference numerals 120 and 122 are originally shown on the middle left side of Figure 7C. With regard to reference numeral 202, "202" has been added to the middle left side of amended Figure 8A. Reference numeral 210 is originally shown on the top left and right of Figure 8B. Reference numeral 508 has been added to the middle of amended Figure 11 (this was a typographical error as "8" should have read "508"). Reference numeral "528" at the right side in amended Figure 11 was amended to read "523" because reference numeral 528 inadvertently appears twice in Figure 11 (see bottom side) and page 22, paragraph 0080, of the specification states that reference numeral 528 is a comb-shaped electrode and that reference numeral 523 is a gap (page 21, paragraph 0078). Reference numerals 533-535 and 537 have been added to the middle of amended Figure 11. Reference numeral 536 is originally shown on the left middle of Figure 11. Reference numerals 539 and 540 have been added to the left side of amended Figure 11. Lastly, reference numeral 650 has been added to the left side of amended Figure 15. Because all of these reference numerals were disclosed in the specification and the reference numerals added to the figures in a manner consistent with the disclosure, the addition of the reference numerals to the Figures do not constitute new matter. Thus, these objections have been overcome.

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The Examiner objected to the Figures for including reference numerals 455, 458, 516, 518, 519, 528 and 544, which are allegedly not mentioned in the specification. These objections have been overcome as explained below. With regard to reference numeral 455, applicants cannot find this reference numeral in the Figures. If the Examiner intended to object to reference numeral 450, 452, 454 or 555, each of these numerals is described in the specification at page 25, paragraph 0085. If the Examiner intended to object to reference numeral 456, "456" is described in the specification at page 25, paragraph 0086. Thus, it appears that there is no reference numeral 455 and no grounds to object to any of the reference numerals for which "455" could have been a typographical error.

Reference numeral 458 is shown on the left side of Figure 12 and described in the specification at page 25, paragraph 0087, and thus, no amendment is required. Reference numeral 516 is shown on the lower left side of Figure 11 and described in the specification at page 21, paragraph 0077, and thus, no amendment is required. Reference numeral 528 is shown on the bottom of Figure 11 and described in the specification at page 22, paragraph 0080, and thus, no amendment is required. As for the second occurrence of numeral 528 (shown on the right side of Figure 11). This typographical error has been changed to "523" in amended Figure 11.

Reference numerals 518 and 519 are shown as input signals on the left side of Figure 11. Applicants added reference numerals 518 and 519 after "two inputs" in paragraph 77 on page 21 of the specification. This change does not add any new matter because Figure 11 originally showed the reference numerals.

Reference numeral 544 inadvertently pointed to the rotating microstructure in Figure 12, which already has reference numeral 543. Thus, applicants submit herewith an amended Figure 12 that corrects this typographical error by moving reference numeral 544 to point to the "degree of freedom" arrow in Figure 12. Accordingly, reference numeral 544 was also added after "degree of freedom" in paragraph 0085 on page 24. These amendments do not add any new matter because the arrow showing the degree of freedom was originally present in Figure 12.

The Examiner objected to Figure 11 because reference numeral "526" should be

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"525." Applicants have amended Figure 11 accordingly. This amendment does not add any new matter because the original specification states that reference 525 is a spring so this merely corrects a typographical error in Figure 11. See page 22 at paragraph 0080. Thus, this objection has been overcome.

The Examiner objected to Figure 11 for failing to show reference numerals 533 and 534. This objection has been overcome because, as discussed previously, reference numerals 533 and 534 have been added to the middle of amended Figure 11.

The Examiner objected to Figure 13 because top input should be labeled "562," instead of "565." This objection has been overcome because the Figure 13 has been amended so that the top input is labeled with reference numeral 562.

Obviousness-Type Double Patenting Rejection

The Examiner rejected claims 1-17 as being unpatentable for obviousness-type double patenting over U.S. Patent No. 6,647,168. Applicants submit herewith a Terminal Disclaimer that overcomes this rejection.

Conclusion

Because the Examiner did not make any rejections over the prior art or Section 112, and applicants have overcome all objections to the Figures as well as the obviousness type double patenting rejection, applicants submit that the claims are in condition for allowance. Should the Examiner have any questions or comments, the undersigned can be reached at (949) 567-6700.

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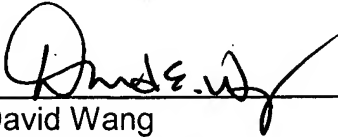
The Commissioner is authorized to charge any fee which may be required in connection with this Amendment to deposit account No. 15-0665.

Respectfully submitted,

ORRICK, HERRINGTON & SUTCLIFFE LLP

Dated: December 22, 2004

By: _____


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Amendments to the Drawings

Attached herewith are replacement drawings sheets 1-14 submitted to replace drawing sheets 1-14.